

Opener -Rel'n with Two Variables

Monica works on a berry farm for summer employment. She hopes to earn \$300 this summer for a new bike. She earns \$0.75 per basket of strawberries and \$0.25 per basket of raspberries. Represent the relationship with an equation. If she only picks strawberries ,how many baskets would she need to pick?

Apr 23-12:55 PM

Opener -Rel'n with Two Variables

Matti works on a berry farm for summer employment. She hopes to earn \$300 this summer for a new bike. She earns \$0.75 per basket of strawberries and \$0.25 per basket of raspberries. Represent the relationship with an equation. If she only picks strawberries ,how many baskets would she need to pick?

$$\begin{aligned} ax+by &= c \\ s+r &= 300 \\ 0.75s + 0.25r &= 300 \\ r=0 \\ 0.75s + 0.25(0) &= 300 \\ 0.75s &= 300 \\ \frac{0.75s}{0.75} &= \frac{300}{0.75} \\ s &= 400 \end{aligned}$$

She would need to pick 400 baskets of strawberries to earn \$300.

Apr 23-12:55 PM

5.3 Relationships with Two Variables
Finding Solutions

Ralph

$$2t + 5g = 100$$

$t=0$

$$2(0) + 5g = 100$$

$$5g = 100$$

$$\frac{5g}{5} = \frac{100}{5}$$

$$g = 20$$

$g=0$

$$2t + 5(0) = 100$$

$$2t = 100$$

$$\frac{2t}{2} = \frac{100}{2}$$

$$t = 50$$

$t=50$

$g=20$

$(0, 50)$

$(50, 0)$

$(10, 35)$

$(14, 15)$

$(20, 0)$

Apr 23-1:11 PM

$$2t + 5g = 100$$

$t=25$

$$2(25) + 5g = 100$$

$$50 + 5g = 100$$

$$5g = 100 - 50$$

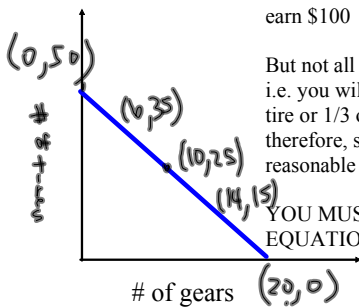
$$5g = 50$$

$$\frac{5g}{5} = \frac{50}{5}$$

$$g = 10$$

If he changes 10 gear assemblies he needs to replace 25 tires.

Apr 23-1:20 PM



All points on this line are considered Solutions to the problem (combos to earn \$100

But not all are reasonable i.e. you will not get paid to fix 1/2 a tire or 1/3 of a gear therefore, some solutions are not reasonable

YOU MUST UNDERSTAND YOUR EQUATION

Apr 23-1:25 PM

Seatwork

p 295 q 7-11
p296 q 12, 16

Apr 23-1:35 PM

Hmk Ques

$$ax + by = c$$

$$\$30a + \$10r = \$150$$

$$r = 7.5$$

$$30a + 10(7.5) = 150$$

$$30a + 75 = 150$$

$$30a = 150 - 75$$

$$\frac{30a}{30} = \frac{75}{30}$$

$$a = 2.5$$

Therefore if the mixture is 7.5 kg raisins it has 2.5 kg of almonds.

Apr 20-1:47 PM

$$8) 3c + 7t = 60$$

$$t = 3$$

$$3c + 7(3) = 60$$

$$3c + 21 = 60$$

$$3c = 60 - 21$$

$$\frac{3c}{3} = \frac{39}{3}$$

$$c = 13$$

If she made 3 tables she had time to make 13 chairs.

Apr 20-1:55 PM

$$a) c + h = 800$$

$$c + h = 800$$

$$0.03c + 0.05h = 800$$

$$c = 2500$$

Apr 20-2:00 PM

$$10 \quad 0.05n + 0.25q = \$1250$$

$$\$2n + \$10q = 250$$

$$0.05 \times 40 = \$2$$

$$0.25 \times 40 = \$10$$

$$q = 17$$

Apr 20-2:06 PM

$$q + n = 250$$

$$0.25q + 0.05n = 250$$

$$n = 40$$

Apr 23-1:51 PM